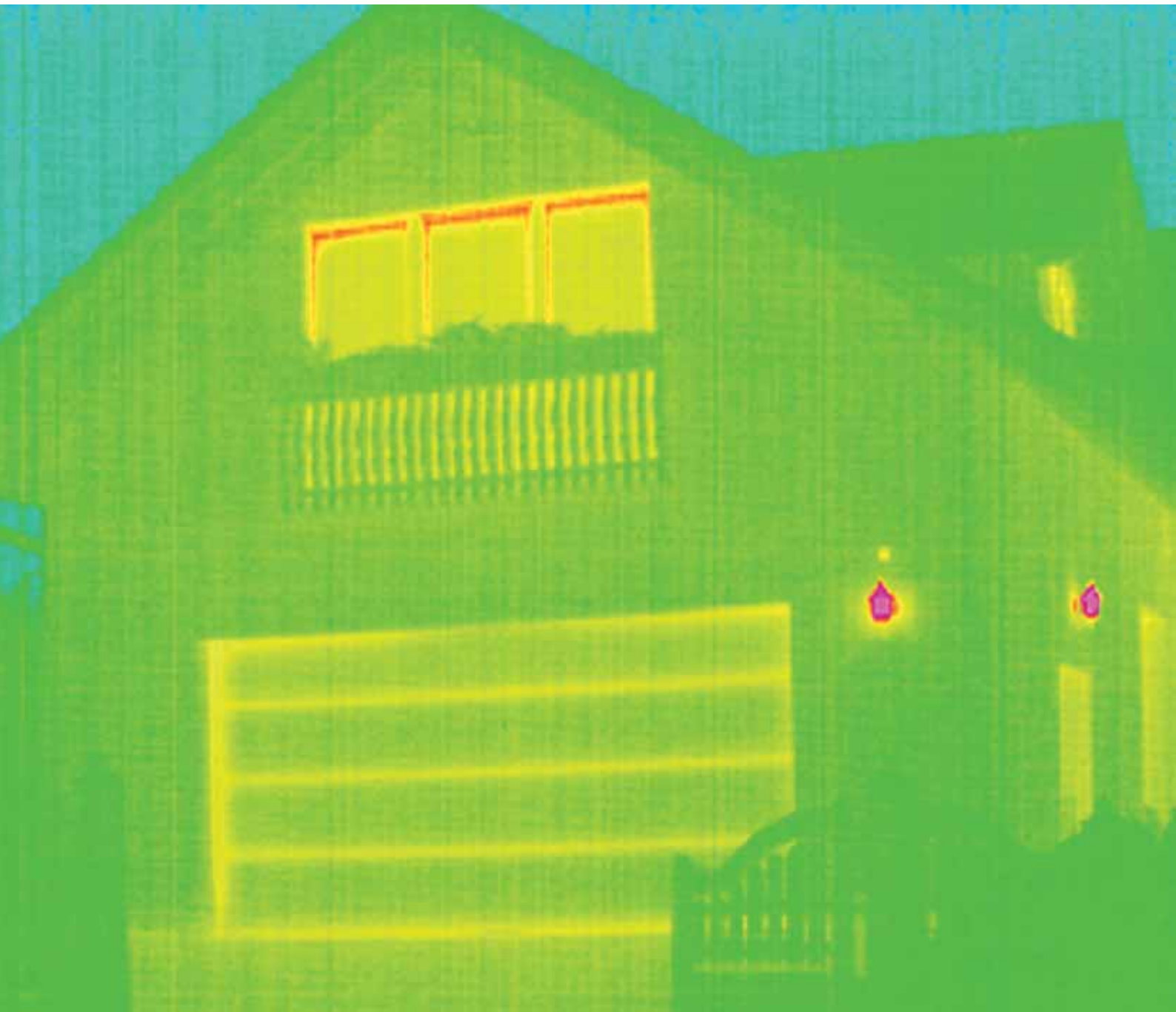


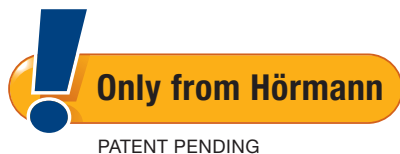
Optimum thermal insulation

Tested and certified



A well insulated garage door is always recommended when the garage and the home are directly connected. The ThermoFrame frame connection further improves the already high insulation values of the double-skinned Hörmann sectional garage doors.

This reduces your energy costs.



ThermoFrame Improved thermal insulation for sectional doors

The plastic profile that can be simply fitted together with the door frame, creates a thermal break between the frame and the brickwork, improving the thermal insulation by up to 15%*.

In addition, extra lip seals on both sides and in the upper section of the door provide better sealing while lowering the loss of heating energy from the garage interior.

The optional ThermoFrame frame connection is optionally available for all Hörmann sectional garage doors.

Performance characteristics according to European standard 13241-1

At Hörmann, the four important characteristics of thermal insulation, acoustic insulation, tightness and sealing, and wind load for garage doors are tested and certified.

These are important for your choice of door over and above the mandatory safety requirements. For example: thermal and acoustic insulation for the garage, sealing against adverse weather effects and resistance to wind pressure in particularly windy regions.

Thermal insulation

Double-skinned steel doors 42 / 20 mm	
Section	U = 1.0 W/(m ² ·K)
Door leaf	U = 1.4 W/(m ² ·K)
Fitted door ¹⁾	U = 1.8 W/(m ² ·K)
Double-skinned steel doors 42 mm	
Section	U = 0.5 W/(m ² ·K)
Door leaf	U = 0.9 W/(m ² ·K)
Fitted door ¹⁾	U = 1.4 W/(m ² ·K)
Single-skinned steel doors	
Door leaf	U = 6.0 W/(m ² ·K)
Fitted door ¹⁾	U = 6.5 W/(m ² ·K)
Doors with solid timber infill	
Door leaf	U = 2.5 W/(m ² ·K)
Fitted door ¹⁾	U = 3.0 W/(m ² ·K)

Acoustic insulation

Single-skinned steel doors	R = approx. 20 dB
Double-skinned steel doors 42 / 20 mm	R = approx. 21 dB
Double-skinned steel doors 42 mm	R = approx. 25 dB

Sealing

Air	Single-skinned steel doors	Class 0 ²⁾
	Double-skinned steel doors ribbed (not L-ribbed)	Class 2
	Double-skinned steel doors panelled and L-ribbed	Class 3
	Doors with solid timber infill	Class 0 ²⁾
Water	Single-skinned steel doors	Class 0 ²⁾
	Double-skinned steel doors	Class 3 ³⁾
	Doors with solid timber infill	Class 0 ²⁾

Wind load

Single-skinned steel doors	Class 2
Double-skinned steel doors 42 / 20 mm	Class 3
Double-skinned steel doors 42 mm	Class 3
Doors with solid timber infill	Class 3

Higher wind load classes on request

* For a double-skinned sectional garage door LPU size 5000 × 2125 mm

¹⁾ The U-values apply to fitted doors without glazing and a size of: 5000 × 2125 mm

²⁾ Doors with ventilation slots, on request classes 2-3

³⁾ Up to 70 Pa water pressure